## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A <u>computer implemented method of automatically reloading a page on a</u> client computing device, <u>the computer implemented method comprising</u>: <del>characterised in that it comprises the steps of</del>

storing a page on a server;

transmitting a copy of the page to a browser of the client computing device in response to a request from said browser received at said server, said copy of the page being transmitted to the browser over a network connecting the client computing device to the server;

responsive to receiving a real-time notification that the server is updating the content of the page stored on the server[[;]], determining, by a message broker, whether a change message is to be communicated to the browser, based on a user selected list of network addresses for the client registered with the message broker, wherein the user selected list of network addresses comprises a plurality of network addresses of pages to be automatically maintained in an updated form; and

<u>simultaneously</u> transmitting <u>the change message</u> a <u>message</u> to said browser <u>in real-time</u>, <u>by the message broker</u>, in response to the message broker determining that the network address of the <u>page is registered in the list of network addresses for the client computing device</u>, wherein the change <u>message notifies the browser notifying it of a change in the content of the page, wherein ; and on receipt of said change content message, causing said browser <u>automatically requests to automatically request</u> a copy of the updated page.</u>

- 2. (Currently Amended) The computer implemented of claim 1 A method as claimed in claim 1, wherein characterised in that the change message is generated by an application implementable by the server.
- 3. (Currently Amended) The computer implemented of claim 1 wherein A method as claimed in claim 1, characterised in that the server is an application server.
- 4. (Currently Amended) The computer implemented method of claim 1, wherein the message broker is located on a message broker server A method as claimed in claim 3, characterised in that the change message is relayed to the browser of the client computing device by a message broker server.

- 5. (Currently Amended) The computer implemented method of claim 1 wherein A method as elaimed in claim 4, characterised in that the message broker server comprises a publish/subscribe engine and in that the change message is communicated to the browser using a socket transport protocol.
- 6. (Currently Amended) The computer implemented method of claim 1 further comprising:

  A method as claimed in any of claims 2 to 5, characterised in that it includes the steps of the client computing device browser registering with [[the]] a message broker agent/server [[the]] a network address of a page, by the browser; and

the message broker agent/server determining, by the message broker agent/server, on the basis of said registered network page address, whether a received change message is to be communicated to the browser.

- 7. (Currently Amended) The computer implemented method of claim 1 further comprising:

  registering, A method as claimed in claim 6, characterised in that the browser registers with the message broker agent/server, a plurality of network addresses for pages which are used by the message broker agent/server to determine if a received change message is to be communicated to the browser.
- 8-9. (Canceled)
- 10. (<u>Currently Amended</u>) The computer implemented method of claim 1 wherein the user selected <u>list of network addresses</u> A method as claimed in claim 8, characterised in that the network addresses registered by the browser with the message broker agent/server comprise a user selected subset of the browser bookmark list.
- 11. (Currently Amended) The computer implemented method of claim 1 wherein the browser comprises A method as claimed in any preceding claim, characterised in that the a program code for causing said browser to automatically request a copy of the updated page upon receipt of [[a]] the change message forms part of the browser software.
- 12. (Currently Amended) The computer implemented method of claim 11 wherein A method as elaimed in claim 11, characterised in that the program code for causing said browser to automatically request a copy of the updated page upon receipt of [[a]] the change message is downloaded from the message broker agent/server.

- 13. (Currently Amended) The computer implemented method of claim 1 wherein the page comprises a A method as claimed in claim 1, characterised in that the program code for causing said browser to automatically request a copy of the updated page upon receipt of [[a]] the change message, and wherein the program code comprises a Java applet embedded in the a downloaded page.
- 14. (Currently Amended) The computer implemented method of claim 13 wherein A method as elaimed in claim 13, characterised in that the browser embeds the Java applet into subsequently downloaded pages from [[the]] a same website.

15-23. (Canceled)

24. (New) A computer implemented method of automatically reloading a page on a client computing device, the computer implemented method comprising:

registering a user selected list of network addresses with a message broker server, wherein the user selected list of network devices comprises a network address of a page that is to be automatically updated;

receiving a change message from the message broker server, wherein the change message provides a real-time notification of a change in content for the page to the client computing device, wherein the page is stored in cache on the client computing device, wherein an address of the page is included in the user selected list of network addresses registered with the message broker server; and

responsive to receiving the change message, requesting an updated copy of the page from an application server, by a push client agent on the client computing device, wherein the page is automatically reloaded in a page update procedure without any activity required by a user to initiate the page update procedure.

- 25. (New) The computer implemented method of claim 24 wherein the push client agent is part of the browser.
- 26. (New) The computer implemented method of claim 24 wherein the push client agent is a Java applet embedded in the page.
- 27. (New) A computer implemented method of automatically reloading a page on a client computing device, the computer implemented method comprising:

storing a page on an application server;

transmitting a copy of the page to a browser of the client computing device in response to a request from the browser received at the application server, said copy of the page being transmitted to the browser over a network connecting the client computing device to the server;

responsive to receiving a real-time notification that the application server is updating the content of the page stored on the server, determining, by a message broker on a message broker server, whether a change message is to be communicated to the browser, based on a user selected list of network addresses for the client registered with the message broker, wherein the user selected list of network addresses comprises a plurality of network addresses of pages to be automatically maintained in an updated form, wherein the user selected list of network addresses comprise a user selected subset of the browser bookmark list, and wherein the message broker server comprises a publish/subscribe engine; and

transmitting the change message to the browser in real-time, by the message broker, in response to the message broker determining that the network address of the page is registered in the list of network addresses for the client computing device, wherein the change message notifies the browser of a change in the content of the page, wherein the browser automatically requests a copy of the updated page, wherein the browser comprises a program code for causing the browser to automatically request a copy of the updated page upon receipt of the change message.